

## SUMMER WILD TURKEY SIGHTING SURVEY 2018



Department of  
Environmental  
Conservation

DEC conducts the Summer Wild Turkey Sighting Survey annually during the month of August to estimate the average number of wild turkey poults (young of the year) per hen statewide and among major geographic regions of the State. This index allows us to gauge reproductive success in a given year and allows us to predict fall harvest potential. Weather, predation, and habitat conditions during the breeding and brood-rearing seasons can all significantly impact nest success, hen survival, and poult survival.

In 2018, we received over 1,300 reports of turkey flocks during the August survey, significantly higher than previous years. The primary reason for the increase in the number of reports is improved awareness of the survey and the ease with which observations can be submitted on-line through the DEC website.

We received reports of 1,140 hen-flocks and the average number of poults per hen was 2.7 (Figures 1-3). This is an increase from last year (2.5 poults/hen), but is slightly below the five-year and ten-year averages (2.85 and 2.76 poults/hen, respectively). Reproductive success (as measured by this survey) gradually improved from the low observed in 2009 through 2015, but the past three years have been below the 10-year average. It is also important to note that reproductive success is lower over the past decade (2008-2018) than during the first ten years of the survey (1997-2007; Figure 1).

The poult/hen estimate improved from 2017 to 2018, but it is important to note that the 2017 estimate was the lowest observed since 2009 (Figure 1). This summer, DEC Region 4 (Capital Region), Region 5 (Eastern Adirondacks/Champlain Valley), and Region 7 (Central NY) observed above-average reproductive success (Figure 2 and 5). About 22% of the hen-flocks observed in 2018 did not have poults. This is a slight improvement from last year, but slightly above the ten-year average (21%).

Data from the National Agricultural Statistics Service indicate that rainfall was below average in May and June in most of the state. Below-average rainfall in May and June likely positively affected nest and poult success (Figure 4); however, despite good weather conditions this spring, production was worse than expected.

Based on the improvement in reproductive success from 2017 to 2018 we expect the fall harvest to be higher than fall 2017. In addition, in areas with poor hard and soft mast production, birds will be more vulnerable to harvest as they are forced to roam in search of food.

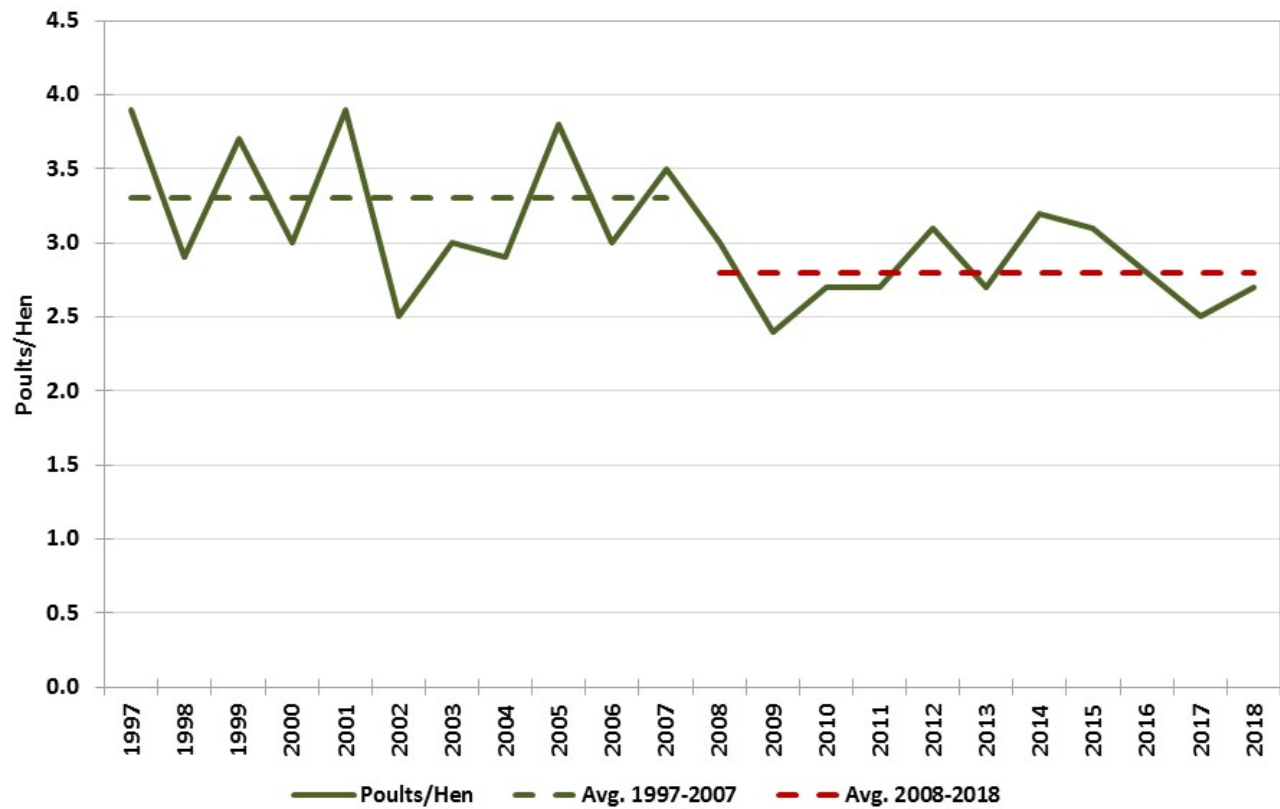


Figure 1. Poults/hen from the summer sighting survey, 1997-2018.

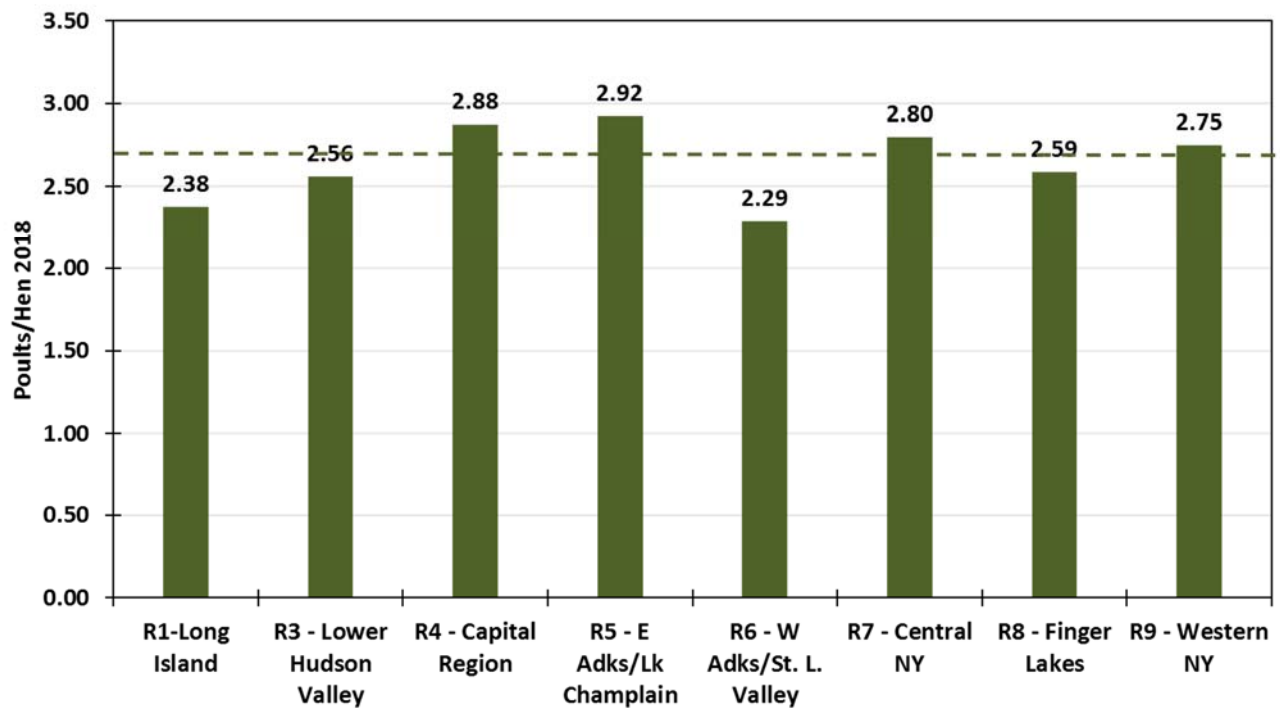
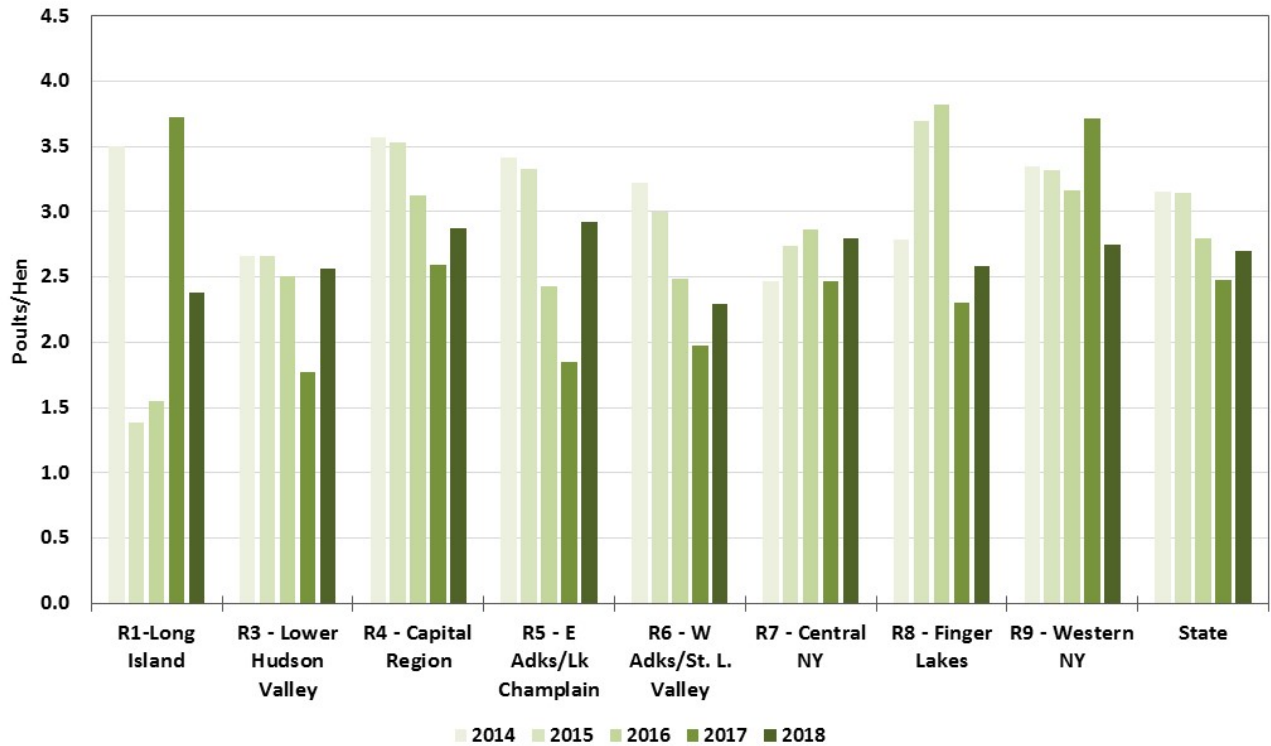
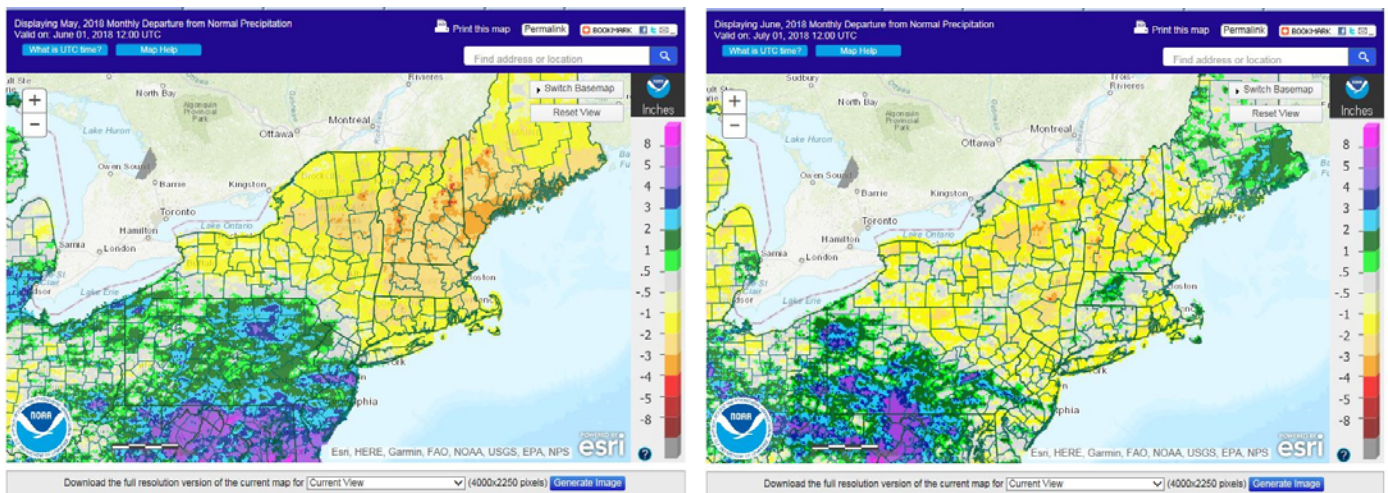


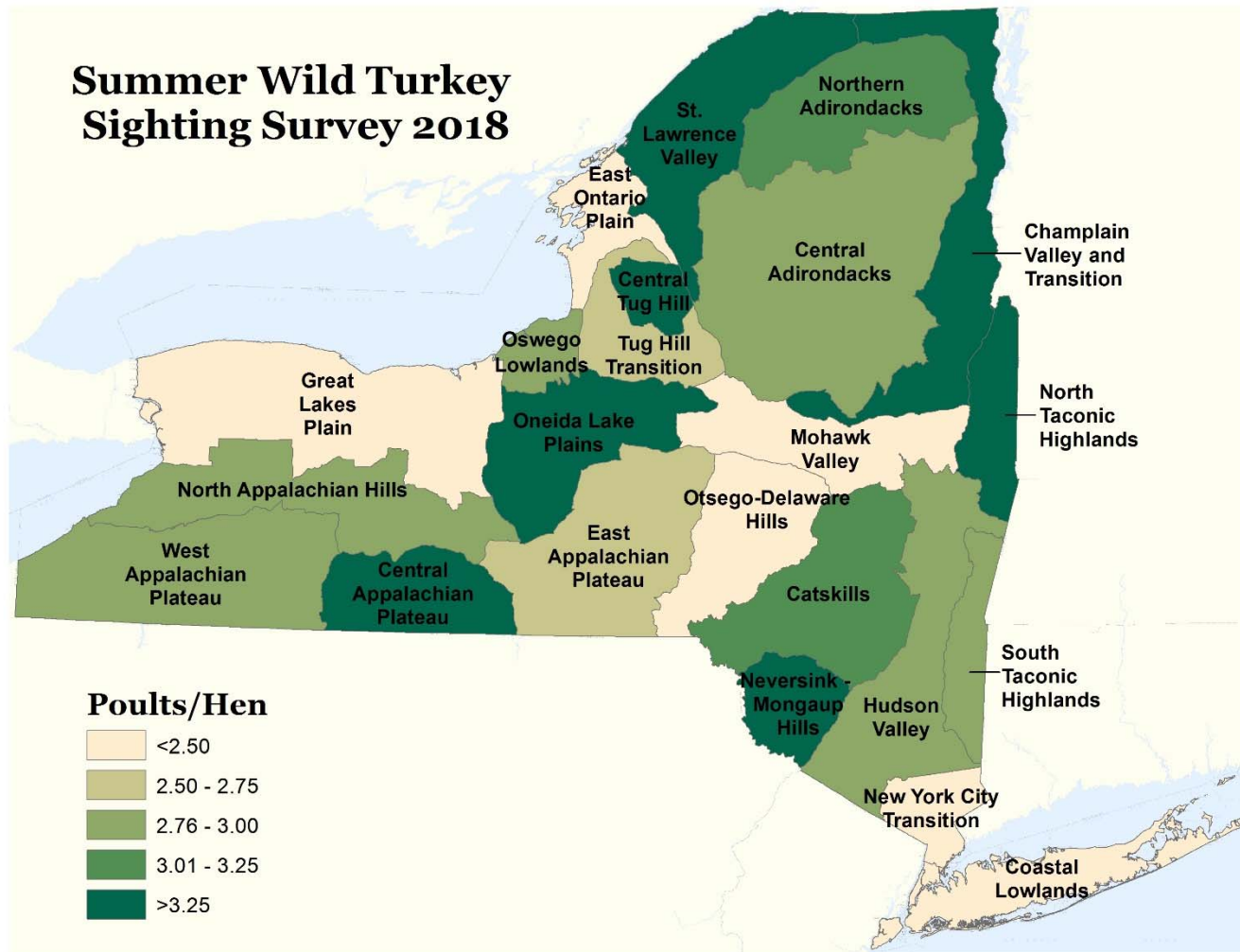
Figure 2. Poults/hen estimates by DEC region, summer 2018. The 2018 statewide average (dashed line) was 2.7 poults/hen.



**Figure 3.** Poult/hen by DEC Region, 2014-2018. The statewide average for this five-year period was 2.85 poult/hen.



**Figure 4.** Departure from normal rainfall in May (left) and June (right), 2018. Images courtesy of the National Oceanic and Atmospheric Administration (NOAA).



WMU Aggregate	Poults/Hen	# Hen-Flocks
Central Adirondacks	2.83	85
Central Appalachian Plateau	4.03	16
Catskills	3.16	101
Champlain Valley & Transition	3.64	51
Coastal Lowlands	2.38	59
East Appalachian Plateau	2.55	62
East Ontario Plain	1.43	50
Great Lakes Plain	2.07	89
Hudson Valley	2.84	129
Mohawk Valley	1.99	86
Northern Adirondacks	3.11	29
North Appalachian Hills	2.84	58
Neversink-Mongaup Hills	3.63	17
North Taconic Highlands	3.56	28
New York City Transition	1.69	7
Oneida Lake Plains	3.67	30
Oswego Lowlands	2.77	10
Otsego-Delaware Hills	2.26	51
St. Lawrence Valley	3.33	49
South Taconic Highlands	2.92	22
Tug Hill Transition	2.60	20
Tug Hill	4.22	5
West Appalachian Plateau	2.83	86

**Figure 5.** Poults/Hen in WMU aggregates of New York State from the Summer Sighting Survey, 2018. The number of hen-flocks in the table at right indicates the sample size used to calculate poults/hen for each aggregate. Statewide regional weighted average poults/hen was 2.7 (n=1,140).



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